

...APRIL 2013 REGIONAL CLIMATE SUMMARY...

SUMMARY FOR THE SAN FRANCISCO BAY AREA AND MONTEREY BAY AREA...

...A WARM...DRY AND OCCASIONALLY WINDY MONTH...
...FORTH CONSECUTIVE DRY MONTH RESULTS IN RECORD DRY JANUARY-
APRIL...

APRIL 2013 WAS DRY MONTH WITH SEVERAL WARM AND SUNNY DAYS. WINDY CONDITIONS OCCURRED PERIODICALLY THROUGHOUT APRIL...MAINLY DURING THE FIRST HALF OF THE MONTH. STRONGEST WINDS OCCURRED DURING THE EARLY MORNING HOURS OF THE 8TH WHEN TREES AND POWER LINES WERE BLOWN DOWN.

AN UPPER LOW THAT BROUGHT SHOWERS AND THUNDERSTORMS TO THE REGION DURING THE LAST FEW DAYS OF MARCH LINGERED OVER THE AREA INTO THE MORNING HOURS OF MONDAY APRIL 1ST. ADDITIONAL RAINFALL ON THE 1ST WAS SCATTERED AND MOSTLY LIGHT. THE EXCEPTION WAS ACROSS PORTIONS OF THE EAST BAY WHERE HEAVIER SHOWERS OCCURRED. NEARLY AN INCH OF RAIN FELL IN OAKLAND AND RICHMOND THAT MORNING.

AFTER A BRIEF WARM-UP ON WEDNESDAY THE 3RD...ANOTHER WEATHER SYSTEM BROUGHT RAIN TO THE REGION DURING THE MORNING OF THURSDAY APRIL 4. THE NORTH BAY PICKED UP THE MOST RAINFALL THAT MORNING...ESPECIALLY SONOMA COUNTY WHERE SOME LOCATIONS ACCUMULATED OVER AN INCH OF RAIN. RAINFALL AMOUNTS TAPERED OFF SIGNIFICANTLY FROM NORTH TO SOUTH THAT DAY. SAN FRANCISCO ONLY PICKED UP A HALF INCH...AND MOST LOCATIONS SOUTH OF SAN FRANCISCO RECEIVED LESS THAN A QUARTER OF AN INCH.

THE ONLY OTHER RAINFALL OF ANY SIGNIFICANCE DURING APRIL OCCURRED LATE ON THE NIGHT OF THE 7TH AS A WEAK COLD FRONT SWEEPED THROUGH THE AREA FROM THE NORTH. RAINFALL AMOUNTS WERE LESS THAN A QUARTER INCH IN NEARLY ALL AREAS. THE PRIMARY IMPACT FROM THIS WEATHER SYSTEM WAS THE STRONG AND LOCALLY DAMAGING NORTHERLY WINDS THAT DEVELOPED BEHIND THE FRONT. THE FRONT MOVED THROUGH SHORTLY BEFORE MIDNIGHT AND WINDS INCREASED RAPIDLY DURING THE EARLY MORNING HOURS OF MONDAY APRIL 8. WIND ADVISORIES WERE POSTED FOR MUCH OF THE LAND AREAS AND GALES WERE POSTED OVER THE COASTAL WATERS AS WELL AS SAN FRANCISCO BAY. WIDESPREAD WIND GUSTS OF OVER 35 MPH WERE OBSERVED WITH SEVERAL LOCATIONS REPORTING GUSTS OVER 50 MPH AND A FEW GUSTS AS HIGH AS 60 MPH. BELOW IS A LIST OF SOME OF THE STRONGEST WIND GUSTS OBSERVED EARLY ON THE MORNING OF THE 8TH:

LOCATION	TIME	WIND GUST (MPH)
POINT SUR LIGHT STATION	6:45 AM	65
SAN FRANCISCO (NEAR OCEAN BEACH)	1:43 AM	62
SAN FRANCISCO AIRPORT	2:12 AM	60
WOODACRE RAWS (MARIN COUNTY)	1:51 AM	59
LOS VAQUEROS RAWS (CONTRA COSTA CO)	2:45 AM	57
SAN FRANCISCO BUOY (BUOY 26)	2:50 AM	56
BODEGA BUOY (BUOY 13)	12:50 AM	54
HALF MOON BAY BUOY (BUOY 12)	4:50 AM	54
HALF MOON BAY AIRPORT	4:15 AM	49
SAN JOSE AIRPORT	3:37 AM	44
MONTEREY AIRPORT	4:40 AM	41

WIND DAMAGE WAS REPORTED THROUGHOUT THE AREA DURING THE EARLY MORNING HOURS OF THE 8TH. MOST DAMAGE REPORTS WERE OF DOWNED TREES...TREE LIMBS...AND POWER LINES IN COASTAL COUNTIES INCLUDING SONOMA...MARIN...SAN FRANCISCO...SAN MATEO...SANTA CRUZ...AND MONTEREY COUNTIES. IN ADDITION...A LARGE WINDOW WAS BLOWN IN AT A HOME IN DALY CITY.

WINDS DIMINISHED QUICKLY AFTER THE 8TH. APRIL 9 AND 10 WERE WARM AND PLEASANT DAYS. BUT WINDY CONDITIONS REDEVELOPED BY THE WEEKEND OF THE 13TH AND 14TH. STRONGEST WINDS DURING THAT WEEKEND WERE PRIMARILY FOCUSED ALONG THE COAST...AND LOCALLY IN THE HILLS...WHERE GUSTS IN EXCESS OF 40 MPH OCCURRED. STRONG AND GUSTY NORTHWEST WINDS BECAME MORE WIDESPREAD ON MONDAY THE 15TH WHEN GUSTS TO 50 MPH WERE COMMON NEAR THE COAST AND IN THE HILLS. BUT EVEN THOUGH WINDS WERE STRONG AND GUSTY AT TIMES FROM THE 13TH THROUGH THE 15TH...NO NOTABLE WIND DAMAGE OCCURRED...AT LEAST NOT LIKE WHAT OCCURRED A WEEK EARLIER ON THE 8TH.

AN UPPER LEVEL HIGH PRESSURE RIDGE PERSISTED NEAR THE WEST COAST FOR MUCH OF THE SECOND HALF OF APRIL. THIS RESULTED IN SEVERAL DAYS OF WARM AND DRY WEATHER ACROSS THE REGION. TEMPERATURES WERE ABOVE NORMAL AT MOST CLIMATE STATIONS FROM THE 18TH THROUGH THE 23RD. TEMPERATURES PEAKED ON MONDAY THE 22ND WHEN FIVE DAILY HIGH TEMPERATURE RECORDS WERE SET. AN UPPER LEVEL LOW MOVING INLAND OVER FAR SOUTHERN CALIFORNIA INTERRUPTED THE WARM SPELL FOR A FEW DAYS FROM THE 24TH THROUGH THE 27TH. THE UPPER RIDGE BEGAN TO REDEVELOP NEAR THE END OF THE MONTH AND TEMPERATURES WARMED BACK ABOVE NORMAL BY THE 29TH.

STRONG OFFSHORE FLOW DEVELOPED OVER THE HILLS OF THE NORTH AND EAST BAY LATE ON TUESDAY APRIL 30TH. A RED FLAG WARNING HAD BEEN ISSUED THE PREVIOUS DAY IN ANTICIPATION OF GUSTY OFFSHORE WINDS COMBINED WITH WARM AND DRY CONDITIONS BEGINNING ON THE EVENING OF THE 30TH. IT IS VERY UNUSUAL FOR RED FLAG WARNINGS TO BE ISSUED SO EARLY IN THE YEAR. IN FACT...THE MONTEREY FORECAST OFFICE HAD NEVER BEFORE ISSUED RED FLAG WARNINGS PRIOR TO JUNE. THE PRIMARY REASON FOR SUCH AN EARLY ISSUANCE THIS YEAR WAS THE PROLONGED FOUR MONTH PERIOD OF MUCH BELOW NORMAL RAINFALL WHICH RESULTED IN RECORD DRY FUELS FOR LATE APRIL.

THE EXTENDED PERIOD OF WARM WEATHER DURING THE SECOND HALF OF THE MONTH...ALONG WITH A FEW DAYS OF WARM WEATHER DURING THE FIRST HALF OF THE MONTH...RESULTED IN AVERAGE TEMPERATURES FOR THE MONTH THAT WERE ABOVE NORMAL AT ALL CLIMATE STATIONS. DEPARTURES FROM THE NORM WERE LARGEST IN THE INLAND VALLEYS WHERE AVERAGE HIGH TEMPERATURES AT SOME LOCATIONS WERE AS MUCH AS SEVEN DEGREES WARMER THAN NORMAL. AVERAGE HIGHS IN COASTAL AREAS WERE WARMER THAN NORMAL TOO...BUT GENERALLY BY ONLY A FEW DEGREES. AVERAGE LOW TEMPERATURES WERE CLOSE TO NORMAL...BUT MOSTLY A BIT ABOVE NORMAL.

RAINFALL TOTALS FOR THE MONTH WERE BELOW NORMAL AT NEARLY ALL CLIMATE STATIONS AND LESS THAN HALF OF NORMAL AT A MAJORITY OF LOCATIONS. BECAUSE APRIL PRECIPITATION WAS MOSTLY CONVECTIVE (SHOWERY) IN NATURE...RAINFALL TOTALS FOR THE MONTH VARIED CONSIDERABLY FROM LOCATION TO LOCATION. A FEW CLIMATE STATIONS ON

THE EASTERN SIDE OF SAN FRANCISCO BAY...INCLUDING OAKLAND AIRPORT...RICHMOND AND BERKELEY...MANAGED TO END THE MONTH WITH NEAR NORMAL OR EVEN SLIGHTLY ABOVE NORMAL RAINFALL. BY COMPARISON...THE SALINAS VALLEY TOWN OF KING CITY PICKED UP ONLY 5% OF THEIR NORMAL RAINFALL DURING APRIL.

ASIDE FROM THOSE FEW CLIMATE STATIONS THAT EXPERIENCED NORMAL RAINFALL IN APRIL...RAINFALL DURING THE FOUR CONSECUTIVE MONTHS FROM JANUARY THROUGH APRIL 2013 WAS WELL BELOW NORMAL AT NEARLY ALL CLIMATE STATIONS. COMBINED RAIN TOTALS FOR THOSE FOUR MONTHS WERE GENERALLY ONLY 15 TO 25 PERCENT OF NORMAL. NEARLY TWO DOZEN CLIMATE STATIONS EXPERIENCED THEIR DRIEST JANUARY-APRIL ON RECORD AND ARE LISTED BELOW.

LOCATION	JAN-APR 2013 TOTAL	JAN-APR NORMAL	JAN-APR PERCENT OF NORM	PREVIOUS JAN-APR RECORD DRIEST/YEAR
BEN LOMOND	5.23	30.36	17	8.42/1984
BERKELEY	4.08	15.71	26	4.59/1976
CLOVERDALE	5.19	24.95	21	8.48/1984
GILROY	1.30	12.76	10	3.59/1977
HALF MOON BAY	3.19	16.84	19	4.04/1972
KENTFIELD	3.55	27.30	13	10.15/1984
LIVERMORE	2.31	9.12	25	2.47/1972
LOS GATOS	2.18	14.84	15	3.47/1984
MARTINEZ	2.22	11.99	19	3.75/1976
MOUNT DIABLO	2.75	14.54	19	3.74/1976
MOUNT HAMILTON	3.92	15.17	26	4.89/1966
NAPA	3.21	15.94	20	4.20/1972
NEWARK	1.73	9.23	19	1.84/1972
OAKLAND	2.79	14.02	20	4.10/1972
OAKLAND AIRPORT	2.63	12.36	21	3.56/1972
OCCIDENTAL	7.00	32.06	22	10.88/1977
PETALUMA AIRPORT	2.99	15.67	19	4.75/1976
REDWOOD CITY	2.02	12.27	16	3.31/1972
RICHMOND	3.55	14.47	25	4.47/1976
SAN FRANCISCO	3.32	13.68	24	3.68/1898
SAN FRANCISCO AP	1.83	12.50	15	3.82/1972
SANTA CRUZ	3.59	19.12	19	5.75/1977
WATSONVILLE	2.57	14.46	18	3.88/1977

IN ADDITION...FOUR-MONTH RAIN TOTALS FOR JANUARY-APRIL AT SEVERAL OTHER CLIMATE STATIONS RANKED IN THE TOP TEN DRIEST. THOSE ARE LISTED BELOW:

LOCATION	JAN-APR TOTAL	RANK	DRIEST JAN-APR/ AMOUNT
PINNACLES NP	1.86	2ND DRIEST	1972/1.63
SAN JOSE	2.19	2ND DRIEST	1972/2.12
SALINAS	2.63	3RD DRIEST	1972/2.30
SALINAS AIRPORT	2.28	3RD DRIEST	1972/2.07
HOLLISTER	3.28	4TH DRIEST	1984/2.91

KING CITY 1.48 4TH DRIEST 1984/0.83

AS OF APRIL 30...YEAR-TO-DATE RAINFALL TOTALS (FOR THE RAIN YEAR WHICH BEGAN JULY 1ST 2012) WERE NOT AS LOW AS MIGHT BE EXPECTED GIVEN THE FOUR MOST RECENT DRY MONTHS. THE WET MONTHS OF NOVEMBER AND DECEMBER 2012 HELPED OFFSET...TO SOME EXTENT...THE VERY DRY START TO 2013. AS OF APRIL 30TH YEAR-TO-DATE RAIN TOTALS ACROSS THE REGION GENERALLY RANGED FROM 60 TO 80 PERCENT OF NORMAL.

...APRIL REGIONAL TEMPERATURE SUMMARY...

LOCATION	AVG HIGH	NORMAL HIGH	DEPARTURE FROM NORMAL	AVG LOW	NORMAL LOW	DEPARTURE FROM NORMAL
NORTH BAY...						
CLOVERDALE	78.5	72.6	5.9	45.7	45.6	0.1
KENTFIELD	73.4	68.4	5.0	48.1	46.0	2.1
NAPA	77.9	71.2	6.7	48.0	45.2	2.8
NAPA AIRPORT	73.6	68.1	5.5	44.1	41.5	2.6
OCCIDENTAL	70.4	66.1	4.3	47.3	45.4	1.9
PETALUMA	71.4	68.7	2.7	46.1	43.8	2.3
SAN RAFAEL	73.6	66.5	7.1	49.2	47.3	1.9
SONOMA COUNTY AP	74.4	68.8	5.6	45.6	42.4	3.2
SAN FRANCISCO PENINSULA...						
HALF MOON BAY	61.2	60.5	0.7	43.9	43.3	0.6
REDWOOD CITY	73.7	69.0	4.7	48.6	46.3	2.3
SAN FRANCISCO AIRPORT	67.4	64.7	2.7	49.5	49.1	0.4
SAN FRANCISCO DOWNTOWN	65.4	63.1	2.3	49.9	49.2	0.7
EAST BAY...						
BERKELEY	70.3	66.8	3.5	47.6	46.5	1.1
CONCORD AIRPORT	75.2	69.8	5.4	48.4	47.4	1.0
FREMONT	71.9	69.0	2.9	49.5	48.5	1.0
HAYWARD AIRPORT	72.3	66.1	6.2	50.6	49.3	1.3
LIVERMORE	77.3	70.7	6.6	47.8	46.0	1.8
LIVERMORE AP	76.2	68.6	7.6	47.9	44.7	3.2
MARTINEZ	76.1	71.9	4.2	47.1	42.7	4.4
MOUNT DIABLO JUNCTION	68.0	64.4	3.6	48.0	43.7	4.3
NEWARK	70.5	67.4	3.1	50.8	50.1	0.7
OAKLAND	71.0	66.3	4.7	51.4	50.0	1.4
OAKLAND AIRPORT	71.3	66.5	4.8	51.7	48.3	3.4
RICHMOND	69.8	66.5	3.3	50.1	49.2	0.9
SOUTH BAY AND SANTA CRUZ COUNTY...						
GILROY	76.1	73.0	3.1	48.0	45.1	2.9

MOFFETT FIELD	72.7	68.7	4.0	51.4	49.4	2.0
MOUNT HAMILTON	59.8	54.9	4.9	44.7	40.8	3.9
SAN JOSE	73.2	69.3	3.9	49.9	48.6	1.3
SANTA CRUZ	73.9	69.5	4.4	46.9	46.0	0.9
WATSONVILLE	69.5	67.6	1.9	47.2	45.5	1.7
WATSONVILLE AP	68.2	66.5	1.7	45.7	44.5	1.2

MONTEREY AND SAN BENITO COUNTIES...

CARMEL VALLEY	73.0	69.4	3.6	42.5	43.4	-0.9
HOLLISTER	74.6	70.3	4.3	44.8	44.3	0.5
KING CITY	78.2	74.5	3.7	45.2	43.5	1.7
MONTEREY AIRPORT	63.2	61.4	1.8	46.7	46.9	-0.2
PINNACLES NP	78.8	71.8	7.0	40.4	39.1	1.3
SALINAS	68.7	66.6	2.1	45.5	44.6	0.9
SALINAS AIRPORT	68.1	67.1	1.0	47.2	46.3	0.9

...APRIL REGIONAL PRECIPITATION SUMMARY...

LOCATION	APR TOTAL	NORMAL APR PRECIP	PERCENT OF NORMAL
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NORTH BAY...

CLOVERDALE	0.41	2.56	16
KENTFIELD	1.30	2.49	52
NAPA	1.19	1.59	75
NAPA AIRPORT	0.71	1.04	68
OCCIDENTAL	2.22	3.58	62
PETALUMA AIRPORT	1.15	1.63	71
SAN RAFAEL	0.83	1.91	43
SONOMA COUNTY AP	1.11	2.09	53

SAN FRANCISCO PENINSULA...

HALF MOON BAY	0.76	1.90	40
PALO ALTO	0.62	0.98	63
REDWOOD CITY	0.51	1.16	44
SAN FRANCISCO AIRPORT	0.47	1.29	36
SAN FRANCISCO DOWNTOWN	1.01	1.46	69

EAST BAY...

BERKELEY	1.72	1.66	104
CONCORD AIRPORT	0.52	1.12	46
FREMONT	0.15	1.16	13
HAYWARD AIRPORT	0.44	1.24	35
LIVERMORE	0.44	1.01	44
LIVERMORE AIRPORT	0.40	1.00	40
MARTINEZ	0.93	1.21	77
MOUNT DIABLO JUNCTION	0.87	1.63	53
NEWARK	0.35	1.02	34

OAKLAND	1.21	1.42	85
OAKLAND AIRPORT	1.33	1.34	99
RICHMOND	1.60	1.47	109

SOUTH BAY AND SANTA CRUZ COUNTY...

BEN LOMOND	1.04	3.24	32
GILROY	0.27	1.25	22
LOS GATOS	0.52	1.40	37
MOFFETT FIELD	0.27	0.98	28
MOUNT HAMILTON	1.08	1.99	54
SAN JOSE	0.26	1.18	22
SANTA CRUZ	0.93	1.97	47
WATSONVILLE	0.79	1.69	47
WATSONVILLE AP	0.60	1.17	51

MONTEREY AND SAN BENITO COUNTIES...

CARMEL VALLEY	0.34	1.38	25
HOLLISTER	0.31	0.97	32
KING CITY	0.04	0.78	5
MONTEREY AIRPORT	0.30	1.12	27
PINNACLES NATL MON	0.20	1.19	17
SALINAS	0.36	1.03	35
SALINAS AIRPORT	0.27	0.93	29

...DAILY TEMPERATURE RECORDS FOR APRIL 2013...

	LOCATION	RECORD MAXIMUM TEMP	PREVIOUS RECORD
4/22	SAN RAFAEL	89	86 IN 1987
4/22	SAN FRANCISCO AIRPORT	83	82 IN 1981
4/22	OAKLAND	87	85 IN 1981
4/22	OAKLAND AIRPORT	85	82 IN 1966
4/22	MOFFETT FIELD	88	84 IN 1981
4/29	SAN RAFAEL	89	89 IN 1957

...MONTHLY RANKS FOR DOWNTOWN SAN FRANCISCO...

AVERAGE HIGH TEMPERATURE....65.4....18TH WARMEST OUT OF 139 YEARS
 AVERAGE LOW TEMPERATURE.....49.9....53RD WARMEST OUT OF 139 YEARS
 PRECIPITATION..... 1.01 IN....79TH DRIEST OUT OF 164 YEARS

...MONTHLY EXTREMES FOR SELECT LOCATIONS...

LOCATION	WARMEST DAY(S)	COOLEST DAY(S)	WETTEST DAY(S)
SANTA ROSA AIRPORT	4/22 91 DEG	4/17 4/18 4/28 41 DEG	4/04 0.94 IN
SAN FRANCISCO	4/22 82 DEG	4/15 4/16 45 DEG	4/01 0.46 IN
LIVERMORE AIRPORT	4/48 4/29 91 DEG	4/16 36 DEG	4/07 0.20 IN
SAN JOSE	4/29 88 DEG	4/16 42 DEG	4/04 0.15 IN
SALINAS AIRPORT	4/21 86 DEG	4/15 4/16 39 DEG	4/04 0.12 IN

NOTE: THIS CLIMATOLOGICAL DATA IS PRELIMINARY. FOR OFFICIAL
 CERTIFIED CLIMATOLOGICAL DATA PLEASE CONTACT THE NATIONAL
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